

60,446-243
03ZFM049

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (CURRENTLY AMENDED) A vehicle transmission system comprising:
an automated mechanical transmission shiftable between a first and a second gear ratio;
a first rotational component;
a second rotational component movable ~~which rotates~~ relative to said first component;
a first sensor adjacent said first rotational component;
a second sensor adjacent said second rotational component;
a controller in communication with said ~~first~~ first sensor and said second sensor, said controller operable to determine a relative movement between said first rotational component and said second rotational component indicative of an approximately zero torque condition to initiate a shift between said first and said second gear ratio.
2. (ORIGINAL) The vehicle transmission system as recited in claim 1, wherein said first and second sensor are speed sensors.
3. (ORIGINAL) The vehicle transmission system as recited in claim 1, wherein said controller identifies a speed irregularity signature generated by said first and second sensor.
4. (CURRENTLY AMENDED) The vehicle transmission system as recited in claim 3, wherein said controller identifies a first noise signature component indicative of an said approximately zero torque condition.
5. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said controller identifies a vibration signature.
6. (ORIGINAL) The vehicle transmission system as recited in claim 1, wherein said first component comprises a shaft.

60,446-243
03ZFM049

7. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said first component comprises a torsional damper.
8. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said first component comprises a transmission input shaft and said second component comprises a transmission output shaft.
9. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said first component comprises a vehicle wheel.
10. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said first component comprises a transmission housing.
11. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said relative movement comprises a torsion movement.
12. (WITHDRAWN) The vehicle transmission system as recited in claim 1, wherein said relative movement comprises an axial movement.

60,446-243
03ZFM049

13. (CURRENTLY AMENDED) A method of controlling a vehicle transmission comprising the steps of:

- (1) determining a relative movement between a first rotational component and a second rotational component;
- (2) relating the relative movement of said step (1) to an approximately zero torque condition; and
- (3) shifting the vehicle transmission between a first and a second gear ratio in response to identification of the approximately zero torque condition.

14. (WITHDRAWN) A method as recited in claim 13 wherein said step (1) comprises determining a torsion movement.

15. (WITHDRAWN) A method as recited in claim 13 wherein said step (1) comprises determining an axial movement.

16. (WITHDRAWN) A method as recited in claim 13, wherein said step (1) comprises: determining a vibration.

17. (CURRENTLY AMENDED) A method of controlling a vehicle transmission comprising the steps of:

- (1) determining a speed irregularity between a first rotational component and a second rotational component;
- (2) relating the speed irregularity of said step (1) to an approximately zero torque condition; and
- (3) shifting the vehicle transmission between a first and a second gear ratio in response to identification of the approximately zero torque condition.

18. (NEW) The vehicle transmission system as recited in claim 1, wherein said first rotational component and said second rotational component are connected to a gear interface such that said second rotational interface rotates relative to said first rotational component through said gear interfacc.

60,446-243
03ZFM049

19. (NEW) The vehicle transmission system as recited in claim 1, wherein said relative movement includes a predetermined signature between said first rotational component and said second rotational component.

20. (NEW) A method as recited in claim 13 wherein said step (1) comprises determining a predetermined noise signature indicative of the approximately zero torque condition.